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| APPLICATION NO.       | FILING DATE |            | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.  | CONFIRMATION NO. |  |
|-----------------------|-------------|------------|----------------------|----------------------|------------------|--|
| 10/017,504            | 12/14/2001  |            | John O. Lamping      | 020087-003500US 5615 |                  |  |
| 20350 7               | 7590        | 05/26/2004 |                      | EXAMINER             |                  |  |
| TOWNSEND<br>TWO EMBAR |             | OWNSEND A  | NGUYEN, CINDY        |                      |                  |  |
| EIGHTH FLO            |             | J CENTER   | ART UNIT             | PAPER NUMBER         |                  |  |
| SAN FRANCI            | SCO, CA     | 94111-3834 | 2171                 | . ,                  |                  |  |

DATE MAILED: 05/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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|---|---|---|--|-----------|--|--|--|--|
| ***   |   | Application No.   | Applicant(s)   | /         |  |  |  |  |
|   |   | 10/017,504  | LAMPING ET AL.   |           |  |  |  |  |
| Office Action Summa   | ry  | Examiner  | Art Unit   |           |  |  |  |  |
|   |   | Cindy Nguyen  | 2171   |           |  |  |  |  |
| The MAILING DATE of this cor<br>Period for Reply  | nmunication appe  | ars on the cover sheet v  | vith the correspondence address  | ; <b></b> |  |  |  |  |
| A SHORTENED STATUTORY PERI THE MAILING DATE OF THIS COM  - Extensions of time may be available under the pri after SIX (6) MONTHS from the mailing date of the  - If the period for reply specified above is less than  - If NO period for reply is specified above, the maxi  - Failure to reply within the set or extended period to  - Any reply received by the Office later than three nearned patent term adjustment. See 37 CFR 1.70  Status | MUNICATION.  ovisions of 37 CFR 1.136  is communication.  thirty (30) days, a reply w  mum statutory period will  for reply will, by statute, conths after the mailing de   | (a). In no event, however, may a within the statutory minimum of the apply and will expire SIX (6) MC ause the application to become well as the application to be application. | reply be timely filed irty (30) days will be considered timely. NTHS from the mailing date of this communi | cation.   |  |  |  |  |
| 1) Responsive to communication  | (s) filed on <u>22 Mai</u>  | r <u>ch 2004</u> .  |  |           |  |  |  |  |
| 2a)⊠ This action is <b>FINAL</b> .  | _   | ction is non-final.   |  |           |  |  |  |  |
|   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. |   |  |           |  |  |  |  |
| Disposition of Claims   |   |   |  |           |  |  |  |  |
| <ul> <li>4)  Claim(s) 1-19 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-19 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>  |   |   |  |           |  |  |  |  |
| Application Papers  |   | orden (oquiromonii  |  |           |  |  |  |  |
| 9) The specification is objected to 10) The drawing(s) filed on 14 Dec Applicant may not request that an Replacement drawing sheet(s) income  | ember 2001 is/are<br>y objection to the dr<br>cluding the correctio   | awing(s) be held in abeya<br>n is required if the drawin  | nnce. See 37 CFR 1.85(a).<br>g(s) is objected to. See 37 CFR 1.1   |           |  |  |  |  |
| 11) The oath or declaration is object   | •   | miner. Note the attache   | ed Office Action or form PTO-15  | 2.        |  |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120  12)  |   |   |  |           |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Re 3) Information Disclosure Statement(s) (PTO-1   |   |   | Summary (PTO-413) Paper No(s)<br>Informal Patent Application (PTO-152)                                     | ·         |  |  |  |  |

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#### **DETAILED ACTION**

This is in response to amendments filed 03/22/04.

#### 1. Response to Arguments

Applicant's arguments filed 03/22/04 have been fully considered but they are not persuasive.

Applicant argues: Doerre does not teach or suggest: inputting an initial organization structure into the clustering process. In response, Doerre clearly discloses: inputting an initial organization structure into the clustering process as to categorize objects means to assign them to predefined categories or classes... see col. 14, lines 26-56.

Applicant argues: Doerre does not teach or suggest: determining a resulting organization structure based upon the processing, the resulting organization structure more closely resembling the initial organization structure...". Doerre's categorization clearly is an organization structure for the documents, see col. 13, lines 62 to col. 15, lines 20.

Applicant argues: Doerre does not teach or suggest: at least one additional category coupled to the initial organization structure. Doerre clearly discloses: at least one additional category coupled to the initial organization structure, see col. 18, lines 52-67.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

## 2. Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Regarding claims 1 and 11, this is meaningless –any organization structure is "more closely resembling" thru an empty one.

### 3. Information Disclosure Statement

The information disclosure statement (IDS) submitted on 03/30/04 was filed after the mailing date of the rejection on 12/18/03. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

#### 4. Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

# 5. Claims 1-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Doerre et al. (U.S 6446061).

Regarding claims 1 and 11, Doerre discloses: A method and a computer aided information organization device for clustering a plurality of items, each of the items including information, guided toward an initial organization structure, the method comprising:

inputting a plurality of items, each of the items including information, into a clustering process (col. 12, lines 17-34, Doerre);

inputting an initial organization structure into the clustering process, the initial organization structure including one or more categories, at least one of the categories being associated with one of the items (col. 12, lines 35-41, Doerre);

processing using at least processing hardware the plurality of items based upon at least the initial organization structure and the information in each of the items in at least the clustering process (col. 19, lines 35-41, Doerre)

determining a resulting organization structure based upon the processing, the resulting organization structure more closely resembling the initial organization structure than if an empty organization structure or an alternative initial organization structure had been input into the clustering process (col. 14, lines 57 to col. 15, lines 20, Doerre);

storing the resulting organization structure in the one or more memories or another memory (col. 15, lines 15-20, Doerre).

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Regarding claims 2 and 12, all the limitations of these claims have been noted in the rejection of claims 1 and 11 above, respectively. In addition, Doerre discloses: wherein the processing comprises determining a likeness level between a first item and a second item, the likeness level between two items increased if they are both similar to items in one or more of the categories of the initial organization structure col. 18, lines 25-44, Doerre).

Regarding claims 3 and 13, all the limitations of these claims have been noted in the rejection of claims 2 and 12 above, respectively. In addition, Doerre discloses: wherein the determining the likeness level between the first item and the second item comprising:

associating a first feature vector with the first item and a second feature vector with the second item, each feature vector representing information associated with each item (col. 17, lines 28-43, Doerre);

adding a first additional feature and a second additional feature to the first feature vector and the second feature vector of the first item and the second item, respectively, the first additional feature representing a first category of the initial organization structure and the second additional feature representing a second category of the initial organization structure, the first additional feature providing a degree to which the first item is similar to one or more items in the first category of the initial organization structure (col. 13, lines 63 to col. 14, lines 20, Doerre);

calculating a degree of similarity of the first item and the second item including calculating a similarity measure between the first additional feature and the second additional feature (col. 18, lines 13-24, Doerre).

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Regarding claims 4 and 14, all the limitations of these claims have been noted in the rejection of claims 1 and 11 above, respectively. In addition, Doerre discloses: wherein the resulting organization structure includes a portion of the initial organization structure and at least one additional category coupled to the initial organization structure (col. 14, lines 42-51, Doerre).

Regarding claim 5, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Doerre discloses: wherein the resulting organization structure relates to the initial organization structure based upon a category similarity (col. 15, lines 1-20, Doerre).

Regarding claim 6, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Doerre discloses: wherein the resulting organization structure relates to the initial organization structure based upon a similarity of hierarchy structure (col. 18, lines 52-67, Doerre).

Regarding claim 7, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Doerre discloses: wherein the item is a document, a product, a person, a DNA sequence, a purchase transaction, a financial record, or a species description (col. 18, lines 25-44, Doerre).

Regarding claim 8, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Doerre discloses: further comprising outputting the resulting organization structure on an output device (col. 20, lines 44-57, Doerre).

Regarding claim 9, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Doerre discloses: wherein the processing hardware uses at least a 500 MHz clock to efficiently run the clustering process (col. 20, lines 16-30, Doerre).

Regarding claim 10, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Doerre discloses: wherein the plurality of items includes at least 10,000 items (col. 20, lines 32-42, Doerre).

Regarding claim 15, all the limitations of this claim have been noted in the rejection of claim 11 above. In addition, Doerre discloses: further comprising a sixth code directed to outputting the resulting organization structure, the resulting organization structure including a plurality of categories (col. 15, lines 15-20, Doerre).

Regarding claim 16, all the limitations of this claim have been noted in the rejection of claim 15 above. In addition, Doerre discloses: further comprising a seventh code directed to inputting additional items using the resulting organization structure (col. 15, lines 15-20, Doerre).

Regarding claim 17, all the limitations of this claim have been noted in the rejection of claim 11 above. In addition, Doerre discloses: further comprising a sixth code directed to independently modifying the resulting organization structure using a graphical user interface (col. 16, lines 61-67, Doerre).

Regarding claim 18, all the limitations of this claim have been noted in the rejection of claim 17 above. In addition, Doerre discloses: wherein the independently modifying is provided by a user coupled to the graphical user interface (col. 17, lines 1-6, Doerre).

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Regarding claim 19, Doerre discloses: a computer implemented method for clustering a plurality of items, the method comprising: inputting a first hierarchy, the first hierarchy includes at least one category (col. 13, lines 24-54, Doerre);

inputting a plurality of items, each of the plurality of items includes information (col. 14, lines 26-57, Doerre);

the at least one category being associated with one of the items (col. 14, lines 26-57, Doerre);

processing by the computer the plurality of items based upon at least the first hierarchy and the information in each of the items (col. 14, lines 26-57, Doerre);

deterring a second hierarchy based upon the processing the second hierarchy includes a portion of the first hierarchy and at least one additional category coupled to the first hierarchy (col. 18, lines 53-67, Doerre);

storing the second hierarchy in memory (col. 14, lines 57 to col. 15, lines 20, Doerre); assigning each of the plurality of items to a category of the second hierarchy (col. 12, lines 16 to col. 13, lines 54, Doerre).

### 6. Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pirolli et al. (U.S 5895470). System for categorizing documents in a linked collection of documents.

Hickerman et al. (U.S 6216134). Method and system for visualization of clusters and classifications.

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Keith (U.S 6629097). Displaying implicit associations among items in loosely structured

data set.

Marques (U.S 6182066). Category processing of query topics and electronic document

content topics.

7. Contact Information

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Cindy Nguyen whose telephone number is 703-305-4698. The examiner can

normally be reached on M-F: 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet

Metjahic can be reached on 703-308-1436. The fax phone numbers for the organization where this

application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7240

for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should

be directed to the receptionist whose telephone number is 703-305-3900.

ON

Cindy Nguyen May 24, 2004

WAYNE AMSBURY

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